**I-Series**

**Slim**

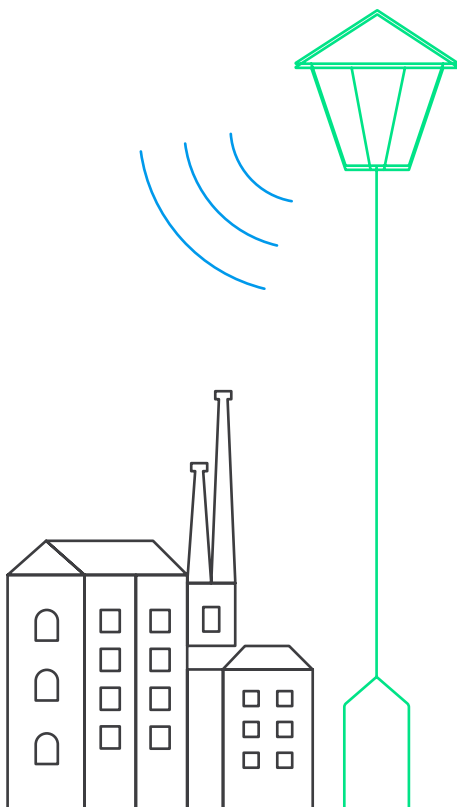## BrightSites I-Series Slim

Base constructed from ASTM Grade A 572 steel with extruded aluminum decorative panels for aesthetics. Mid pole is aluminum construction with anchor plates welded to top and bottom. Decorative covers at mid-pole and base sand cast from low-copper aluminum. Two 8.5" by 50" (102 by 203 mm) maintenance panels with security lock for access to IoT equipment. Customized configuration is possible, please consult our factory for the request.

# Slim - Configuration Sheet

example I6101-12-RS-T-33-A-PA-WA-11S-CR-11N-N-N-N-N-5T-N-N-E

| Series | Pole height | Mid-Pole Type | Style | Tenon | Finish | PoE Option |
|--------|-------------|---------------|-------|-------|--------|------------|
| ☐ **I6101** IoT Installed | ☐ **12** 12' | ☐ **RS** 5" Round, Smooth | ☐ **T** Traditional | ☐ **33** 3" dia. X 3" tall | ☐ **A** Black, Smooth | ☐ **PA** Outdoor PoE Switch, 4 Ports |
| ☐ **I6201** IoT Ready | ☐ **14** 14' | ☐ **FF** 5" Flat Flute | ☐ **C** Contemporary | ☐ **44** 4" dia. X 4" tall | ☐ **B** White, Smooth | |
| | ☐ **16** 16' | | | ☐ **46**[1] 4" dia. X 6" tall | ☐ **H** Bronze, Smooth | |
| | ☐ **18** 18' | | | ☐ **49**[1] 4" dia. X 9" tall | ☐ **I** Gray, Smooth | |
| | | | | | ☐ **J** Green, Smooth | |

## Ordering Guide (continued)

| Option 1[2] | | Option 1 Height/Direction[6] | | Option 2[2] | | Option 2 Height/Direction[6] | | Option 3[2] | | Option 3 Height/Direction[6] | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ☐ **WR** WiFi Ready | | ☐ **11** 11' High | ☐ **N**[7] | ☐ **WR** WiFi Ready | | ☐ **11** 11' High | ☐ **N**[7] | ☐ **WR** WiFi Ready | | ☐ **11** 11' High | ☐ **N**[7] |
| ☐ **WA**[3,5] WiFi Installed, Ruckus | | ☐ **13** 13' High | ☐ **E** | ☐ **WA**[3,5] WiFi Installed, Ruckus | | ☐ **13** 13' High | ☐ **E** | ☐ **WA**[3,5] WiFi Installed, Ruckus | | ☐ **13** 13' High | ☐ **E** |
| ☐ **WB**[3,5] WiFi Installed, Ruckus Unleashed | | ☐ **15** 15' High | ☐ **S**[8] | ☐ **WB**[3,5] WiFi Installed, Ruckus Unleashed | | ☐ **15** 15' High | ☐ **S**[8] | ☐ **WB**[3,5] WiFi Installed, Ruckus Unleashed | | ☐ **15** 15' High | ☐ **S**[8] |
| ☐ **CR**[4,5] Camera Ready | | ☐ **17** 17' High | ☐ **W** | ☐ **CR**[4,5] Camera Ready | | ☐ **17** 17' High | ☐ **W** | ☐ **CR**[4,5] Camera Ready | | ☐ **17** 17' High | ☐ **W** |
| ☐ **CA**[4,5] Camera Installed (Good) | | ☐ **N** None | | ☐ **CA**[4,5] Camera Installed (Good) | | ☐ **N** None | | ☐ **CA**[4,5] Camera Installed (Good) | | ☐ **N** None | |
| ☐ **CB**[4,5] Camera Installed (Better) | | | | ☐ **CB**[4,5] Camera Installed (Better) | | | | ☐ **CB**[4,5] Camera Installed (Better) | | | |
| ☐ **CC**[4,5] Camera Installed (Best) | | | | ☐ **CC**[4,5] Camera Installed (Best) | | | | ☐ **CC**[4,5] Camera Installed (Best) | | | |
| ☐ **SA** Sensor Ready, Air quality | | | | ☐ **SA** Sensor Ready, Air quality | | | | ☐ **SA** Sensor Ready, Air quality | | | |
| ☐ **N** None | | | | ☐ **N** None | | | | ☐ **N** None | | | |

## Ordering Guide (continued)

| Option 4[2] | | Option 4 Height/Direction[6] | | Data Source | Meter | Outlet[10] | Voltage |
|---|---|---|---|---|---|---|---|
| ☐ **WR** WiFi Ready | | ☐ **11** 11' High | ☐ **N**[7] | ☐ **FA**[9] Fiber Splice Box | ☐ **I** Internal (Demand) | ☐ **D** Standard Duplex | ☐ **E** 120V |
| ☐ **WA**[3,5] WiFi Installed, Ruckus | | ☐ **13** 13' High | ☐ **E** | ☐ **5B** Siklu Ready, Base | ☐ **N** External/None | ☐ **G** GFI Duplex | ☐ **F** 208V |
| ☐ **WB**[3,5] WiFi Installed, Ruckus Unleashed | | ☐ **15** 15' High | ☐ **S**[8] | ☐ **5T** Siklu Ready, Terminal | | ☐ **N** None | ☐ **G** 240V |
| ☐ **CR**[4,5] Camera Ready | | ☐ **17** 17' High | ☐ **W** | | | | |
| ☐ **CA**[4,5] Camera Installed (Good) | | ☐ **N** None | | | | | |
| ☐ **CB**[4,5] Camera Installed (Better) | | | | | | | |
| ☐ **CC**[4,5] Camera Installed (Best) | | | | | | | |
| ☐ **SA** Sensor Ready, Air quality | | | | | | | |
| ☐ **N** None | | | | | | | |

## Ordering Guide: Anchor Bolts

example I6001AB-R

| Code | | Thread Type | |
|------|---|-------------|---|
| I6001AB | | | |
| ☐ **I6001AB** IoT Pole | | ☐ **R** Rolled | |
| | | ☐ **C** Cut | |

**Footnotes:**
1. Tenon options for hub and bracket.
2. See Specification section for possible combinations and limits.
3. Maximum height for WA & WB and SA option is 11'.
4. Consult Factory for other camera models.
5. Options not available with I6201.
6. See schematic on page 3. Maximum accessory height is 1' less than selected pole height. Maximum accessories at single height is two at 180 degrees (i.e. 11S and 11N).
7. Default camera location.
8. Default WiFi antenna location.
9. SFP to be supplied by others.
10. Standard location for receptacle is 1' from top of pole, 90 degrees clock-wise from Accessory 1.

# Slim - Wind Data and Specifications

## Pole Data

| Catalog Number | Mide-Pole Type | Nominal Height (ft) | Nominal Height (m) | EPA Rating 80 MPH (sq. ft.) | EPA Rating 90 MPH (sq. ft.) | EPA Rating 100 MPH (sq. ft.) | EPA Rating 110 MPH (sq. ft.) | EPA Rating 120 MPH (sq. ft.) | EPA Rating 130 MPH (sq. ft.) | EPA Rating 140 MPH (sq. ft.) | EPA Rating 150 MPH (sq. ft.) | Anchor Bolts (in) | Anchor Bolts (mm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| I6001 | RS | 12 | 3.7 | 37 | 29 | 23 | 19 | 16 | 13 | 11 | 10 | 3/4-20 | 19-483 |
| I6001 | RS | 14 | 4.3 | 28 | 22 | 17 | 14 | 12 | 10 | 8 | 7 | 3/4-20 | 19-483 |
| I6001 | RS | 16 | 4.9 | 22 | 16 | 13 | 11 | 9 | 7 | 6 | 5 | 3/4-20 | 19-483 |
| I6001 | RS | 18 | 5.5 | 17 | 13 | 10 | 8 | 7 | 5 | 5 | 4 | 3/4-20 | 19-483 |
| I6001 | FF | 12 | 3.7 | 33 | 25 | 21 | 17 | 14 | 12 | 10 | 9 | 3/4-20 | 19-483 |
| I6001 | FF | 14 | 4.3 | 28 | 19 | 15 | 12 | 10 | 9 | 7 | 6 | 3/4-20 | 19-483 |
| I6001 | FF | 16 | 4.9 | 19 | 15 | 12 | 9 | 8 | 6 | 5 | 4 | 3/4-20 | 19-483 |
| I6001 | FF | 18 | 5.5 | 15 | 11 | 9 | 7 | 5 | 4 | 4 | 3 | 3/4-20 | 19-483 |

**Note**: The recommended method for calculating EPA (Effective Projected Area) is in accordance with AASHTO 2009 standards, three second gusts and 50 year winds. EPA ratings shown are applied at top of pole and assume 30 lbs./sq. ft. load.
**Important**: Do not obstruct space between anchor plate and concrete base.

# System Description and Technical Specifications

## Pole
Comes standard with structural steel base, hot-dip galvanized for corrosion resistance in outdoor environment. Base is enclosed by extruded aluminum side panels and two removable doors for aesthetics and access to IoT equipment inside. Doors are secured by keyed lock and tamper-resistance fastener. Mid-pole has two style options: **RS** is 5" round, smooth aluminum shaft, **FF** is 5" flat flute aluminum shaft with low-copper sandcast anchor plate, welded top and bottom. Anchor bolt and transition covers are two-piece sandcast, mechanically fastened to pole with stainless steel hardware and come in two styles: T Traditional and C Contemporary. Tenon comes in various sizes to accommodate post top luminaires or bracket hubs and is fastened to pole with stainless hardware for flexibility in the field.

## Product Tiers
**I6101** (Tier 1) comes with IoT equipment included and all supporting hardware.
**I6201** (Tier 2) comes with supporting hardware to enable field or future installation of selected IoT equipment (i.e. main disconnect, power wiring, PoE switch, etc.) Available accessory options vary by Tier selected.

## IoT Options/Accessories
**WR** comes with required hardware and bracketry to enable field or future installation of Ruckus E510 equipment. **WA** option comes with Ruckus E510 equipment and all supporting hardware. **CR** is camera-ready for select models of Axis cameras (**CA, CB,** and **CC**). Consult factory for other makes/models. **CA** includes Axis camera P3245-LVE and all supporting hardware. CB includes Axis camera Q3517-LVE. CC includes Axis camera Q6125-LE.

**SA** Includes physical provision to accept Vaisala AQ420 air quality sensor, MOG100 gateway and QMP213 power supply. For best accuracy performance, sensor arm is provided in white finish. Consult factory for other options.

Accessory compatibility and combinations – **WA** or **WB** accessory can only be selected once, up to three additional PoE-based accessories (i.e. cameras and/or sensors) can be selected for total of four (4).

## Data Source
**FA** option includes passive fiber box for splicing incoming fiber. **5B** option includes Siklu Multihaul B100 base unit, mounting hardware, and provisions for field installation on the pole. Contact factory for kit if installing base unit remote from pole on building or other structure.
**5T** option includes Siklu MultiHaul T201 compact terminal unit, mounting hardware, and provisions for field installation on the pole.

## Meter
Provision is made to install a meter inside the base. Meter to be provided by others.

## Outlet
Optional outlet is field wired to be always-on or switch on/off with luminaire control.

## Electrical
Pole is supplied with main disconnect of IoT equipment. Luminaire and receptacle wiring is on separate circuit. Surge protection device tested in accordance with ANSI/IEEE C62.45 per ANSI/ IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line-Ground, Line-Neutral and Neutral-Ground. Rugged, outdoor-rated PoE switch, with integral surge protection powers IoT equipment.

## Finish
Color in accordance with the AAMA 2603 standard. Application of polyester powder coat paint (4 mils/100 microns) with 1 mils / 24 microns of tolerance. The Thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard. The surface treatment achieves a minimum of 2000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard.
Mid-pole only: Durable polyurethane enamel finish. Laboratory tested for superior weatherability and fade resistance in accordance with ASTM B-117-64 and ANSI/ASTM G53-77 specifications.
For projects where a custom color is required, contact the factory for more information.

## Manufacturing Standard
The electronic components sensitive to electrostatic discharge (ESD) are assembled in compliance with IEC61340-5-1 and ANSI/ESD S20.20 standards to eliminate ESD events that could decrease the useful life of the product.
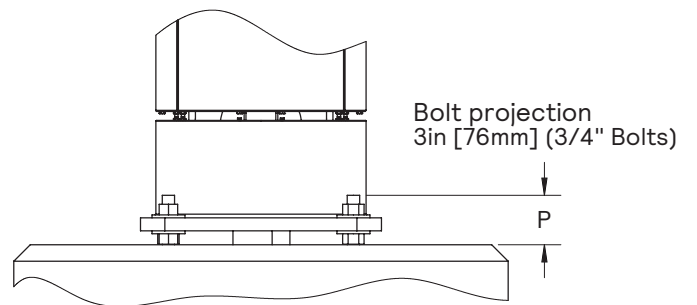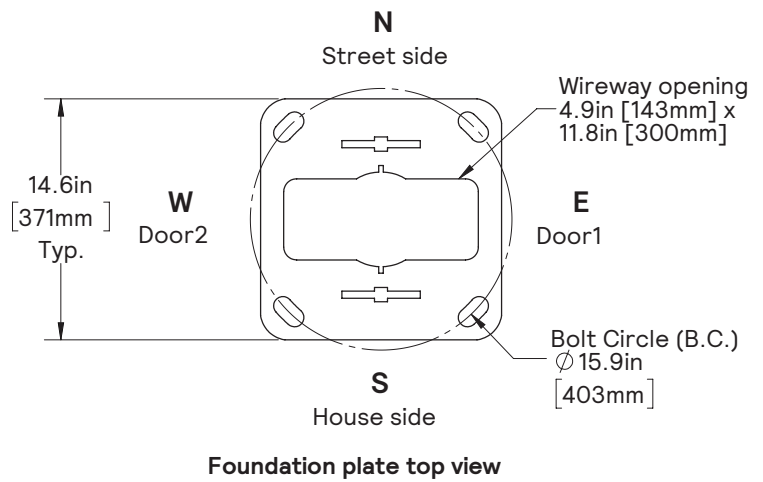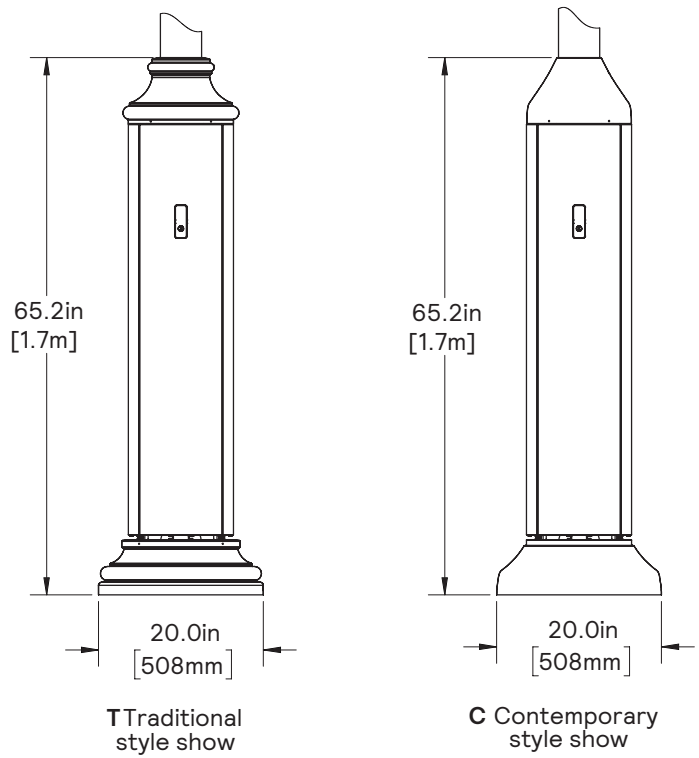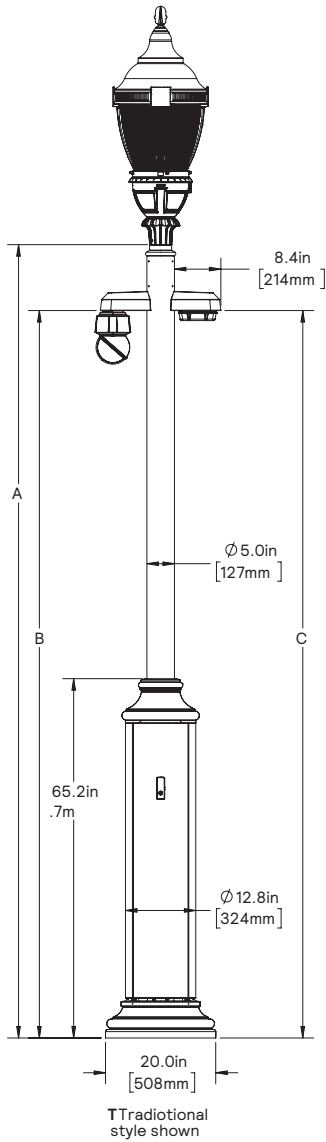
## Certifications and Compliance
Manufactured to ISO 9001:2008 Standards. UL1598, 62368-1, and 60950-22 (US). ETL listed to U.S. safety standards for wet locations.

## Ambient Temperature
Equipment inside smart pole is rated to operate up to 122F (50C) ambient temperature with one camera, one WiFi, and one PoE. For operation at higher temperature and custom configurations please consult factory.

**Banner**
Banner arms could be installed on pole and Signify recommends wind-shedding banner arms for use with I-Series Slim to reduce wind load on pole. Verify load on pole before adding banner arms or other equipment.

65.2in
[1.7m]

20.0in
[508mm]

**T** Traditional
style show

65.2in
[1.7m]

20.0in
[508mm]

**C** Contemporary
style show

8.4in
[214mm]

A

⌀ 5.0in
[127mm]

B

C

65.2in
.7m

⌀ 12.8in
[324mm]

20.0in
[508mm]

**T** Tradiotional
style shown

**N**
Street side

14.6in
[371mm]
Typ.

**W**
Door2

Wireway opening
4.9in [143mm] x
11.8in [300mm]

**E**
Door1

Bolt Circle (B.C.)
⌀ 15.9in
[403mm]

**S**
House side

**Foundation plate top view**

Bolt projection
3in [76mm] (3/4" Bolts)

P

**Configurable dimensions** (per ordering guide):
- Pole Height
  A: 12' [3.7m], 14' [4.3m], 16' [4.9m], 18' [5.5m]
- Accessory Height
  B: 11' [3.4m], 13' [4.0m], 15' [4.6m], 17' [5.2m]
  C: 11' [3.4m], 13' [4.0m], 15' [4.6m], 17' [5.2m]
  (Up to four accessories can be selected, with height and orientation Specified per ordering guide. Example shown above is: WA 11N CC 11S)



# signify